

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheet" of drawings includes changes to Figure 1. The attached "Replacement Sheet," which includes Figures 1 and 2, replaces the original sheets including Figures 1 and 2.

Attachment: Replacement Sheet

REMARKS

Claims 1-3, 5-15, 17, 19-22 and 24 are now pending in the application, with claims 4, 16, 18, 23 and 25 being canceled herein. Of these pending claims, Claims 1-3, 5-15, 17, 19-22 and 24 stand rejected. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The drawings stand objected to for certain informalities. Applicants have attached revised drawings for the Examiner's approval. In the "Replacement Sheet which shows the "blasted finish" is illustrated as requested by the examiner.

REJECTION UNDER 35 U.S.C. § 112

Claims 23 and 25 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. Claims 23 and 25 have been cancelled, thus obviating the rejection.

REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103

Claims 1-4, 6, 8-10, 12, 13, 15, 17-21, and 23-25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Maroney et al. (U.S. 2002/0099445 A1). Claims 1-8, 10, 12, 13-15, 17-20, and 23-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by the disclosure of Copeland™ Humeral Resurfacing Head (Biomet

Orthopedics, Inc.: 2000 brochure). Claims 11, 16, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Maroney, et al. (U.S. 2002/0099445 A1) in view of Pappas et al. (U.S. Pat. No. 4,470,158). In view of the amendments and arguments herein, these rejections are respectfully traversed.

Initially, it is noted that each of the above identified rejections includes a Caveat. Namely, the Office Action stated that it appears the Applicant has been using the terms “resurfacing and resection” interchangeably. Applicant respectfully traverses this characterization. Specifically, Applicant asserts that those skilled in the art would recognize the “resurfacing” of a joint surface represents the removal of associated cartilage and cortical bone surface, while “resection” includes the removal of cancellous bone.

The Examiner’s attention is directed to independent Claims 1 and 13, which have been amended to include the limitation that the interior or coupling surface of the head is concave. Further, Claim 1 has been amended to include the limitation that the anchoring device is directly coupled to bone and is integral with the head. Claim 13 has been amended to include the limitation that the humeral head has an integral engagement stem that is configured to be coupled directly to bone. In contrast, Maroney et al. (U.S. 2002/0099445 A1) teaches a solid head coupled to a modular stem which is disposed within a medullary canal of a humerus. The Maroney reference fails to teach these limitations.

In response to the statement in the Office Action, “It should be noted that, from the claim language, an arbitrary line or boundary distinguishes/defines the “extended articulating surface.” Independent Claims 1 and 13, have been further amended to

clarify that the articulating surface of the head is “hemispherical” and that the extended articulating surface protrudes beyond the hemispherical articulating surface. Applicant notes that the “Copeland Humeral Resurfacing Head” reference does not teach these limitations.

Claim 1 as amended further contains the limitation that the anchoring device is “straight” and further has a textured outer surface configured to be directly coupled to bone. Again, the Maroney reference fails to teach this limitation. Maroney teaches a humeral head having a depending smooth Morse taper. The Morse taper is used to couple the head to a curved stem which has been implanted into the medullary canal of the humerus.

Claim 13 has been further amended to include the limitation that the humeral head has an extending flange protruding from the hemispherical articulating surface. The flange has a planar “V” shaped inner surface. Applicant notes that the “V” shaped inner surface allows for the proper positioning of extending articulating flange, and prevents rotation of the head about an axis defining the hemispherical articulating surface. Maroney nor Copeland teaches such a “V” shaped inner surface

Applicant further submits that it would be improper to combine the Maroney and the Copeland references in as much as Morse taper of Maroney would not function as designed should it have a textured outer surface. This is because Morse tapers require highly polished surface finishes to function properly. As such, Applicant submits that one skilled in the art would not be motivated to combine the references to form the claimed invention.

Independent method Claim 19 has been amended to clarify that the resurfacing of the humeral head is removing a portion of the humeral head, while leaving a generally spherical resurfaced surface. This is opposed to the resection shown in the Maroney reference which shows a flat resection through the humeral head.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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